ages pure and simple, and so the section of the Act of Sederunt founded on by Mr Salvesen appears to be applicable, no motion having been made in the Sheriff Court or here to have the higher scale applied.

LORD ADAM—I agree. I think that if it was desired to have the higher scale applied, the matter should have been brought up at the time the action was disposed of. It is not a question of taxation.

LORD M'LAREN—I am of the same opinion. If there had been a real question argued under the conclusions for implement, I should have held that the higher scale ought to be applied.

LORD KINNEAR—I quite agree, and I entirely concur with what Lord Adam has said, that this is a question which ought to be raised at the time when judgment is given, because it is not a question of pure taxation, but a question for the Court as to the construction of the Act of Sederunt and its application to this particular case. But that being so, the question comes to be, under which section of the Act of Sederunt the case falls? And I agree with your Lordship that this is to all intents and purposes an action of damages.

The Court remitted to the Auditor to tax on the lower scale.

Counsel for the Pursuer—Dundas—Abel. Agents—Ronald & Ritchie, S.S.C.

Counsel for the Defenders—Balfour, Q.C. —Salvesen. Agents — Philip, Laing, & Harley, W.S.

Saturday, June 12.

SECOND DIVISION.

[Lord Low, Ordinary.

WHITE *v.* BERTRAMS, LIMITED.

Patent — Patentable Invention — Combination of Known Mechanical Arrangements—Anticipation—Infringement.

In an action for interdict of an alleged infringement of a patent, the specification of the complainers' patent, which was for "improvements in apparatus for straining paper pulp," stated that it "consisted in imparting an oscillating or rocking motion to the vat or vessel in which the straining operation is effected, and in constructive arrangements connected therewith." The respondent in his specification claimed "the means whereby the back of the vat is intermittently lifted and lowered so as to prevent the refuse matter from being carried back over the strainer plates." It was proved that the vat used in each machine was similar (each containing a pulsating diaphragm or strainer inside), and that the difference between the two machines consisted mainly in the different forms of motion imparted to the vat, that of the complainers' machine being continuous through an equal arc on each side of the perpendicular, while that of the respondent was intermittent, and moved the vat to one side of the perpendicular only. The superiority claimed for the respondents' method of oscillation was that the fibrous matter (which it was the object of the oscillation to remove from the strainer) was sent to one side only, and could thus be more conveniently carried off.

It was proved that a third party, B, had several years before, in a provisional specification which was abandoned, and from which no working machine had ever been constructed, suggested rocking the vat of pulp-straining machines from side to side on an axis placed in the centre of the vat itself, but that the complainer was the first to suggest oscillating the vat from an axis placed some distance below it so as to enable the oscillating motion of the vat to be combined with a pulsating motion of the diaphragm placed in the bottom of the vat by which the straining of the pulp was mainly effected. In B's specification the pulsation of the diaphragm was obtained by steam jets, a method which was inferior to the mechanical method. It was also proved that the combination of the two mechanical motions was a *desideratum* in paper-straining machines, and that the complainers' machine had been a commercial success. The essential feature of the combination consisted in placing the axis of the rotating shaft communicating the pulsating motion in the same vertical plane with and parallel to the axis of oscillation. The mechanical means by which the pulsation of the diaphragm was effected was not a novelty, and was similar in both the complainer's and respondents' machines. *Held* (1) that the complainers' invention had not been anticipated by B's specification; (2) that although simple it exhibited invention sufficient to disclose good subject-matter of a patent right; and (3) that the respondents' machine was an infringement of it.

Patent—Ambiguity of Specification — Discrepancy between Provisional and Complete Specification—Insufficient Description.

The specification described the shaft for pulsating the diaphragm as being "in line with and parallel to" the axis on which the vat oscillated. *Held* that the specification and drawings must be read together, and so read there was no ambiguity in the description of the mode in which the invention was to be carried out.

In August 1896 John White, Leith Walk Foundry, Edinburgh, presented a note of suspension and interdict against Bertrams, Limited, engineers, St Katherine's Works, Sciennes, Edinburgh, praying the Court "to suspend the proceedings complained of, and to interdict, prohibit, and discharge the respondents from infringing the letters-patent granted to the complainer for "Improvements in apparatus for straining

paper pulp," No. 17022 A.D. 1891, dated and sealed 30th July 1892, by making, vending, exercising, or using, in whole or in part, the apparatus for straining paper pulp described in the said letters-patent and in the provisional specification of the said invention dated 6th October 1891, and in the complete specification thereof, dated 25th June and accepted 30th July 1892, as amended upon leave granted on 29th May 1896, and from making, vending, exercising, or using any apparatus or mechanical appliance made or constructed in the manner described in the said letters-patent and specifications, or in manner substantially the same; and in particular, without prejudice to the foregoing generality, from making, using, or vending the apparatus made by or for the said respondents, and advertised by them for sale under the name of 'D. N. Bertram's Patent Simplex Strainer, with improved automatic plate washing movement, and other improvements,' and from infringing the complainer's said invention described in the said letters-patent and specifications in any manner or way."

The complainer's complete specification as amended was as follows—"This invention relates to the class of pulp-straining apparatus in which flat plates ordinarily fixed in a horizontal position are employed; and it consists in imparting an oscillating or rocking motion to the vat or vessel in which the straining operation is effected, and in constructive arrangements connected therewith whereby the action is improved and various practical advantages are obtained." The specification then made reference to explanatory drawings, and went on—"In carrying out my invention the strainer vat is supported by journals fixed in downward end extensions fixed to the vat, these journals resting in bearings on a fixed bedframe. The vat is made to oscillate or rock by means of a connecting rod jointed to it and to a slowly rotating crank-pin; or the motion might be derived from an eccentric or from a cam, which last can be shaped to give whatever particular motion may be found best in practice. Beneath the strainer plates in the vat a pulsating diaphragm is arranged in a usual manner, and is made to reciprocate by means of rods fixed to them and jointed upon small-throw cranks on a rotating shaft situated directly below the vat and in line with or parallel to the axis on which the vat rocks. . . . The shaft, by a pinion and spurwheel, drives a second-motion shaft, the crank-pin for giving the rocking motion being on the spurwheel. The strained pulp passes from the space below the strainer plates in the vat down one of the end parts which is made hollow, and through a hollow trunnion which is concentric with the axis on which the vat rocks, and which extends through a stuffing box into a box having an overflow outlet, the bottom of which is adjustable so as to maintain the desired head of pulp in the strainer vat. The strainer vat is made with channels along each side (or it might be, a single channel along one side) of the strainer plates, and when the pulp contains fibres which refuse to go through the strainer plates, such fibres accumulate in the channels, from which they may be removed from time to time. . . . The strainer vat may be fitted with a single strainer plate, and with a single pulsating diaphragm, as in the modifications shown in figures 1 to 4, or it may be fitted with two strainer plates and two pulsating diaphragms, as shown in figures 5 and 6, the two strainer plates being either level with each other as shown in figure 5, or slightly inclined to each other as shown in figure 6." Figure 6 showed two strainers, each sloped from a middle partition to the side. "The two pulsating diaphragms may be worked by means of crossheads to which the connecting rods are fixed. The oscillating or rocking motion of the strainer vat causes the pulp to wash across the strainer plates, and the wash removes fibres or materials which will not go through the strainer plates, taking them into the side channels, whence they may pass off through the valve outlets. Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is—(1) In pulp straining apparatus of the type in which the usual pulsating diaphragm under the strainer plates is operated from a rotating shaft below, imparting an oscillating or rocking motion to the vat or vessel in which the straining operation is effected, substantially in the manner hereinbefore described. (2) Forming the strainer vat with a channel at one or at each side, and providing one or more periodically opened valve outlets in connection with such channel substantially as and for the purposes hereinbefore described."

The apparatus of the respondents which was alleged by the complainers to infringe their patent was constructed under letters-patent granted to D. N. Bertram in 1895. Bertram in his complete specification described his invention as follows—"This invention relates to improvements in pulp strainers of paper-making machines and has for its object the construction of a strainer which will overcome the objections hitherto attached, more or less, to the various classes of strainers at present in use, that is to say, that in accordance with my said invention no hanks, knots, or unboiled fibres will remain on the surface of the plates, nor come in contact with the strainer plates after they have been separated from the clean pulp. The revolving strainer and other strainers having an oscillating motion, hitherto used, cause the pulp around them and on their surface to be kept in a state of agitation and in contact with the plate surfaces, and thus permit of the liability of the deleterious matter being sucked through the strainer plates and passed on to the wire of paper-making machines. This invention has also for its object to provide means whereby the refuse matter is washed off the face of the strainer plates and is prevented from again coming in contact with the face of

the said plates, as is the case with strainers having an oscillating motion imparted to them. In accordance with my said invention the pulp flows into a cast-iron vat in which is fitted, as usual, the strainer plates, the said plates being preferably formed with their slits running parallel to the apex of the plates but at an angle to the flow of the pulp therefrom. The vat with the said strainer is arranged to work either level or at an angle, which angle can be arranged more or less as desired so as to correspond to the quantity of water used in the pulp, and to other circumstances which affect the flow of the pulp over the face of the said strainer plates. To effectually wash any refuse matter off the face of the strainer plates which may catch on the slits thereof, I impart an intermittent motion to the vat, which motion lowers one side of the vat so as to cause a wash into the refuse channel, the said motion returning the vat to the position from which it started." After more particularly describing the nature of the invention, he declared that what he claimed was—"(First) In pulp strainers for paper-making machines, the means whereby the back of vat is intermittently lifted and lowered, so as to prevent the refuse matter from being carried back over the strainer plates, as described and shown."

The respondents lodged answers. They relied on three main grounds of defence. Their first defence was that there was no novelty in the complainer's patent it having been antipicated by an invention for which Robert Brodie, engineer, Leith, had obtained provisional protection in 1882. This invention was one to cause the diaphragm in a pulp-strainer used in paper-making to move up and down by forcing under it jets of steam or compressed air. The vat might be stationary, but it was by preference mounted on trunnions at the ends, and had a rocking motion imparted to it by means of a rotating eccentric or in any other convenient way, the purpose of the rocking motion being to produce a washing action across the top of the strainer and thus wash off portions of the pulp which would not go through the strainer. Brodie's invention was purchased by a firm of founders but never had been used.

The second defence of the respondents was that the respondents' patent was bad because the description of the alleged invention in his specification was ambiguous.

The third defence of the respondents was that the respondents' apparatus was not in any respect an infringement of the complainer's patent. They averred — "The complainer's alleged invention consists in imparting an oscillating or rocking motion to the vat, and in providing a channel at one or at each side of the vat having periodically-opened valve outlets. The oscillating or rocking motion is in the case of the complainer's said invention continuous, and it causes a raising and lowering of the vat at both sides, whereas in the case of the respondents' simplex strainer the motion is not continuous but intermittent, and one side of the vat is simply raised and lowered intermittently, so that that side is never lowered below the normal position from which it started, and the other side is in turn never raised above its original position. The simplex strainer is in this respect a marked improvement upon the complainer's machine, and upon all other existing machines. In machines made with an oscillating or rocking motion, such as the complainer's, the pulp is washed backwards and forwards over the surface of the strainer plates in such a way that the refuse matter which is in the pulp, instead of being at once carried off, is kept in contact with the surface of the plates, and is liable to be pulled through among the clean pulp, besides impeding the flow of the clean pulp through the strainer plates. In the respondents' simplex strainer, on the other hand, the lowering of one side only causes an intermittent wash always the one way, and prevents the pulp and refuse, once washed off the strainer plates, from being returned. The result in the working of the simplex strainer is that a greater amount of clean pulp can be passed through the plates than in the case of the complainer's machine."

A proof was led before the Lord Ordinary (LOW), the result of which is fully set forth in the note annexed to his interlocutor.

On 20th February the Lord Ordinary pronounced the following interlocutor:—"Suspends the proceedings complained of, and interdicts, prohibits, and discharges the respondents, conform to the prayer of the note of suspension and interdict, and decerns."

Note.—"The complainer's invention relates to a particular kind of pulp-straining apparatus used in the manufacture of paper.

"There were various kinds of pulp-strainers, but that most commonly used was known as the flat-plate strainer, with pulsating disc or diaphragm. It was to it alone that the complainer's invention referred. The flat-plate strainer consisted of a shallow rectangular vat, which was provided with what may be called a double bottom. The uppermost bottom consisted of brass plates, having fine slits across them. The second bottom, which was some distance below the slitted plate or strainer plate, consisted of a pulsating diaphragm. The diaphragm was not rigidly fixed to the vat, but was made to adhere closely to the sides by means of strips of flexible rubber, so that it could be moved up and down inside the vat. The diaphragm was made to pulsate or move rapidly up and down by means of a rod fixed to its under side, and communicating with small throw-cranks on a rotating shaft. The pulp was caused to flow into the vat, and what seems to be called the clean pulp—that is, pulp of an equal constituency, and not containing lumps of fibre or foreign matter—found its way through the slits in the strainer plate, leaving the lumps and other refuse matter on the surface. The object of the diaphragm was to create a pumping or sucking action. When the diaphragm fell it created a partial vacuum, and thereby sucked the pulp through the slits, and when it rose it to

some extent cleared the slits by forcing the pulp upwards.

"These strainers were found to be subject to serious defect. The slits were apt to be choked up with fibrous matter, or pulp not sufficiently reduced to enable it to flow easily through them. Further, fibrous matter frequently got through the slits, but hung to their lower sides, thereby forming hanks which, if they got into the paper-making machine, caused blemishes in the paper.

"Several devices were tried to cure these defects. Thus a scraper was used with the view of periodically scraping all refuse matter off the strainer plate. It was found, however, that the scraper was apt to block up the slits by forcing solid matter between them, and it in no way prevented the formation of hanks below the plate. Then in some cases jets of water were kept playing on the strainer plate, but that also was found not to be efficacious.

"In these circumstances it occurred to tne complainer that if the vat was made to oscillate or rock from side to side, so that the pulp was kept awash, any solid matter would be carried off into side channels, and the formation of hanks upon the under side of the strainer plate would be prevented. The difficulty, however, was to cause the vat to oscillate without destroying the pulsating diaphragm, because, of course, if the vat was made to rock from side to side while the diaphragm continued to be worked straight up and down, the result would be to tear the diaphragm, to a greater or less extent, from the sides of the vat.

"That was the difficulty which the complainer's invention overcame, and he accomplished it in this way. He first carried down the ends of the vat and formed what are called in the specification 'downward end extensions.' These extensions were fixed to journals or trunnions, upon which the vat oscillated. These trunnions (and this was the important part of the invention) were placed in such a position that the centre of oscillation coincided with the centre of the rotating shaft which drove the diaphragm, and the rod which connected the diaphragm with the rotating shaft was thus kept always in the same position relatively to the vat, so that the rocking of the vat did not twist the diaphragm.

"The first question is, whether that invention was a novelty? The respondent maintains that it was anticipated by a provisional specification which was taken out by one Brodie in the year 1882.

"Brodie's main object in taking out the provisional specification was to protect an invention which he had made for causing the diaphragm in a pulp strainer to pulsate by forcing under it jets of steam or compressed air. The result was that in a pulp strainer made according to his method there would be no machinery below the vat.

"In the specification he said that the vat might be stationary, but 'it is by preference mounted on trunnions which are at the ends, and it has a rocking motion imparted to it by means of a rotating eccentric, or in any other convenient way.' In another part of his specification Brodie explained that the purpose of rocking the vat was to produce a washing action across the top of the strainer plate. It is clear, therefore, that Brodie's specification disclosed the idea of an oscillating vat. Brodie's invention was purchased by the firm by whom he was employed, but they never made any use of it. Apparently his idea of making the diaphragm pulsate by means of steam or compressed air was not found practically useful.

"When the complainer made his invention in 1891, and took out a patent, he did not know of Brodie's specification, but believed that an oscillating vat was a novelty. Accordingly, what he then claimed in his specification was an apparatus 'imparting an oscillating or rocking motion to the vat.' Having subsequently become aware of Brodie's specification, he saw that his claim was too wide, and amended his specification to the effect of claiming only the method of imparting an oscillating motion to the vat in the particular kind of straining apparatus which I have described.

"The first question is, whether that invention was anticipated by Brodie's specification? I do not think that it was. Brodie's vat had not machinery under it, and was to be rocked upon trunnions placed at the ends. If that method had been applied to the kind of strainer with which the complainer dealt, the result would have been to wrench and destroy the diaphragm, and what was required was a device whereby the rocking motion of the vat and the motion of the diaphragm could be reconciled. Brodie's specification gave no hint how that could be accomplished, and Brodie himself did not see how it could be done.

"But it was said that, given the idea of rocking a vat upon trunnions, there was no difficulty in applying it to the case of the ordinary strainer, where the diaphragm is pulsated from below, and that therefore the complainer's apparatus involved no exercise of the inventive faculty. All that the complainer had to do was to place two known parts of a machine—namely, the trunnions, upon which the vat rocked, and the rotating shaft—in juxtaposition, and to do that, the respondent argued, required no invention, but simply involved bringing down the trunnions to the required distance below the vat.

"The device, no doubt, appears to be a very simple one after it had been explained, but the same thing might be said of many very important inventions. One would have thought that the complainer's method would have been very readily seen by anyone whose business it was to construct paper-making machines, but the fact remains that although in 1882 Brodie hit upon the idea of rocking the vat, and although it is admitted that by that means defects in the fixed vat, to remedy which various devices had been tried in vain, could be overcome, it was not until 1891, when the complainer took out his patent,

that anyone saw how the rocking motion could be combined with the pulsating motion operated from below the vat. Further, the complainer's device has proved to be of practical utility, and his machine has been a commercial success.

"In these circumstances I am unable to affirm that the complainer's apparatus, simple though it is, was not an invention which he was entitled to have protected by letters-patent.

"In the next place it was strongly pressed that the complainer's specification did not sufficiently describe the invention. That criticism refers to lines 29, 30, and 31, page 2 of the complainer's amended specification, where he describes the position of the rotating shaft by which the diaphragm is moved, relatively to the trunnions upon which the vat rocks. The specification says that the diaphragm is made to reciprocate by means of rods jointed upon small throw-cranks, 'on a rotating shaft situated directly below the vat and in line with or parallel to the axis on which the vat rocks.'

"The words founded on were 'in a line with or parallel to.' The argument was that as admittedly the rotating shaft must be both parallel to *and* in the same vertical line with the axis of the trunnions, it was incorrect and misleading to say that it must be either on a line with *or* parallel to that axis. Now I do not think that the expressions 'in a line with' and 'parallel to' were intended to be read as proper alternatives, but as different modes of expressing the same thing. If the word 'and' had been used instead of the word 'or,' I do not think that the objection could have been stated, and the question seems to me to be, whether the specification when fairly read really presents any ambiguity?

"Now, the natural position of trunnions upon which a vat is to rock is under the centre line of the ends of the vat, and, as the respondent himself points out, the rotating shaft is in practice also put under the centre of the vat. When, therefore, the complainer says that the rotating shaft must be 'directly below' the vat, and on a line with the axis of the trunnions, I do not think that it would occur to a workman to put it in any other position than in the same vertical plane as the axis of the trunnions. And that indeed was admitted by the respondent in his evidence, and by Mr Imray, the patent agent who gave evidence for him. Further, if the workman had any doubt, a glance at the drawings would make the matter clear. I am therefore of opinion that the objection to the sufficiency of the description in the specification is not well founded.

"The next question is, whether the respondent's machine is an infringement of the complainer's patent? The respondent was of opinion that there were two defects in machines made according to the complainer's patent. In the first place, he thought that the pumping action of the diaphragm was not so effective when the pulp was in motion as when it was at rest. In the second place, it appeared to him that if the oscillating motion of the vat was practically constant, as it was in the machines which had been made under the complainer's patent, the fibrous and refuse matter would not always be deposited at once in the side channels, but would be swept backwards and forwards over the strainer plate, thus increasing the risk of the slits being clogged. To cure these defects the respondent makes the oscillating motion intermittent, there being a period of rest between each movement of the vat. Then the vat, instead of rocking—that is to say, moving up and down at each side upon a central axis—is made to tilt; that is to say, one side is made to fall below the horizontal, the other side remaining always in the same horizontal plane. The result is that at each tilt of the vat any refuse matter lying upon the strainer plate is at once thrown into the side channel. Whether there were in fact the defects which I have mentioned in the complainer's machine as made, and whether the respondent's machine cures them, is a point upon which there is a conflict of evidence, and upon which I do not think that it is necessary to express an opinion.

"The first point to which it is important to call attention is that in order to make the vat tilt over, the respondent had to face the very difficulty which was overcome by the complainer's invention, the difficulty, namely, of moving the vat without tearing the diaphragm. That difficulty the respondent has overcome by simply adopting the complainer's method—that is to say, by moving the vat upon trunnions fixed to extensions of the ends of the vat, and by placing the rotating shaft of the pulsating apparatus in the same vertical plane, and parallel to the axis of the trunnions.

"But then it is said that the respondent's machine is designed to attain a different object from that disclosed in the complainer's specification, the object, namely, of tilting instead of rocking the vat. Now, that might have been important if the complainer had limited his invention to imparting a rocking motion as distinguished from any analogous motion. But he has not done so. Although the rocking or oscillating motion is that which he favours, he says in his specification that instead of moving the vat by a rotating crank-pin, 'the motion might be derived from an eccentric or cam, which last can be shaped to give whatever motion may be found best in practice.' These words seem to me to be an intimation that the complainer does not limit his invention to a purely rocking motion. Further, figure 6 of the drawings appended to the specification shows a vat which contains two pulp strainers instead of one. There is a partition running down the middle of the vat, and upon either side of it there is a pulp strainer. The plate of each strainer is sloped down from the partition to the side of the vat, and accordingly when the vat is oscillated the motion of each strainer is a tilting motion such as is exhibited in the respondent's machine.

"It was further contended that the object of the respondent's machine was to impart an intermittent motion to the vat, which could not be given by the complainer's invention. Now, what produces the intermittent motion in the respondent's machine is a slot in the connecting shaft by which the vat is set in motion. If the shaft of the complainer's machine was made with a slot the action of the vat would be intermittent. But the same end could be accomplished by substituting in the complainer's machine a cam for the rotating crank-pin. For such a purpose it is not disputed that a cam and a slot in the shaft are mechanical equivalents. And as I have pointed out, the complainer in his specification says that a cam may be used 'which may be shaped to give whatever particular motion may be found best in practice.' I think that these words cover an intermittent motion.

"I am therefore of opinion that the complainer's patent is good, and that the respondent has infringed it."

The respondents reclaimed, and argued—(1) There was no novelty in the pursuer's patent; his invention in all essential particulars had been anticipated by Brodie's patent. Brodie's patent disclosed the idea of an oscillating vat moving on trunnions and with a pulsating diaphragm. The means by which it was made to pulsate were immaterial. Mechanical ingenuity and skill used in the adaptation of principles were sufficient to warrant a patent, but if the idea was so simple that a workman told to do it could obey without the application of mechanical skill, there was no invention. The application of well understood things to an analogous use was not properly the subject of a patent. If Brodie's patent was taken into account, there was no novelty in the complainer's invention — *Harwood* v. *Great Northern Railway Company*, 1865, 11 Clark's (H.L.) cases 654, opinion of L. C. Westbury, p. 682; *Saxby* v. *Gloucester Wagon Company*, 1881, L.R., 7 Q.B.D. 305; *Morgan* v. *Windover & Company*, 1890, 7 P.O.R. 131; opinions of Lord Halsbury p. 134, and Lord Herschell, p. 137; *Longbottom* v. *Shaw*, 1891, 8 P.O.R. 333; *Rose's Patent Company, Limited* v. *Braby & Company, Limited*, February 27, 1894, 21 R. 1107. (2) The complainer's specification was ambiguous. It was impossible to understand what was the position of the rotating shaft. It was said to be situated "in line with and parallel to the axis on which the vat rocks." This language was unintelligible and misleading. The terms were contradictory. Unless clear instructions were given, the specification was of no value. The patent was therefore bad as there was no sufficient disclosure in the specification —*Bailey* v. *Robertson*, February 23, 1877, 4 R. 545, *aff.* June 21, 1878, 5 R. (H.L.) 179; *Hutchison, Main, & Company* v. *Patullo Brothers*, May 24, 1888, 15 R. 644; *Hinks & Son* v. *Safety Lighting Company*, 1876, L.R., 4 Ch. D. 607. (3) There was no infringement of the complainer's patent. In order to make the respondents' patent bad, it must be shown that the difference between it and the complainer's was a mere colourable alteration. But the respondents' patent imparted a perfectly different kind of motion to the vat, an intermittent tilting motion, instead of as in the case of the complainer's patent a constant oscillating motion. The result was a great improvement, as the fibres were deposited in the side channels instead of being washed backwards and forwards over the plate—*Dudgeon* v. *Thomson*, July 10, 1877, 4 R. (H.L.) 88; *Stewart & Briggs* v. *Bell's Trustee*, December 5, 1883, 11 R. 236; *Gwynne* v. *Drysdale & Company*, March 5, 1886, 13 R. 684; *Young & Bailley* v. *Hermand Oil Company*, March 20, 1891, 8 P.O.R. 285, *rev.* May 16, 1892, 9 P.O.R. 373; *Clark* v. *Adie*, 1877, L.R. 2 App. Cas. 315.

Argued for complainer — (1) The complainer's patent was novel and had not been anticipated. The invention of the complainer was this, that he overcame the danger of the combination of the oscillating motion of the vat, and the upward and downward motion of the diaphragm tearing asunder the diaphragm from the vat. This idea was novel and useful. It supplied a long felt want, and the machine had been a commercial success. Where a difficulty which had been long felt was overcome, that was *prima facie* evidence that the solution of the difficulty was the result of ingenuity and invention—*Gosnell* v. *Bishop*, 1888, 5 P.O.R. 151. There had been no anticipation. Brodie's invention was totally different in kind. If his invention had been applied to any ordinary plate strainer, the diaphragm would have been destroyed. His vat had no machinery under it. Besides, Brodie's invention was an abandoned experiment, and had never been put to public use—*Edison* v. *Holland*, 1889, 6 P.O.R. 243, opinions of Cotton, L.J., p. 277, Lindley, L.J., p. 283, and Bowen, L.J., p. 285; *Nelson* v. *Baird*, November 16, 1843, 6 D. 51. (2) The specification was not ambiguous. "Parallel to" was explanatory not alternative. The description taken along with the figures was fairly made, so that no skilled workman could misunderstand the explanation or fail to make the machine—*Hinks & Son* v. *Safety Lighting Company*, 1876, L.R., 4 Ch. D. 607; *Plimpton* v. *Spiller*, 1877, L.R., 6 Ch. D. 412; opinion of Jessels, M.R. 423; *Edison-Bell Phonograph Corporation, Limited* v. *Smith & Young*, 1894, 11 P.O.R. 389; opinion of Esher, M.R. p. 396. (3) The respondents' apparatus was an infringement of the complainer's patent. The complainer's specification stated that the motion of the vat "might be derived from an eccentric or cam, which last can be shaped to give whatever motion may be found best in practice." This covered intermittent motion and tilt. The fundamental idea of the complainer's patent was the rocking of the vat without damage to the indiarubber connected with the pulsating diaphragm. The kind of motion was unimportant. Besides, in the case of figure 6 in the complainer's specification, when the vat there described oscillated, a

tilting motion of each of the two strainers took place, similar to the tilt of the respondents' patented apparatus.

At advising—

LORD JUSTICE-CLERK—The complainers took out letters-patent about five years ago for "Improvements in apparatus for straining paper pulp," that is, pulp for the making of paper. By this suspension and interdict he desires to have the respondent interdicted from infringing his patent.

Prior to the time when the complainer published the invention the strainers used for the purpose were stationary, and special means by raking or brushing, or otherwise, were necessary to clear away the coarser parts of the pulp which remained on the top of the strainer. There was also a revolving strainer in use, but it was highly unsatisfactory from the great loss of material in using it.

The complainer introduced for the first time in practice a swaying motion of the strainer from side to side by which a rush of the material was caused, having the effect of washing the plates of the strainer, thus enabling the fine pulp suitable for making paper to pass freely through the strainer and clearing off the refuse pulp into channels at the sides of the strainer frame. In flat strainers the floor or bottom of the strainer is held up by sides of india-rubber, thus forming a kind of bellows arrangement, and by mechanical means this diaphragm floor is made to pulsate up and down for the purpose of causing the pulp on the strainer to be kept in motion in the slits of the strainer, to aid the separation of the fine or good pulp from the refuse and keep the strainer from clogging. The arrangement of the complainer was for the purpose of enabling the oscillating or swaying motion of the strainer to be carried on simultaneously with the pulsating of the diaphragm floor, without the machinery communicating the motion causing any wrenching or straining of the apparatus. This the complainer effected by supporting the strainer vat by journals, fixed in downward extensions of the ends of the vat, these journals resting in a fixed bed frame, while by a connecting rod to a suitable motive-power machine working by a crank-pin, or an eccentric or cam, whatever motion was found to be best in practice could be communicated to the vat. In order that the machinery for pulsating the diaphragm might work satisfactorily notwithstanding that the straining vat was kept swaying from side to side, rods were attached by small throw cranks to a shaft situated below the vat in line with or parallel to the axis on which the vat swayed, so that the rods could follow the motion of the vat, and so communicate the pulsating motion to the diaphragm without interfering with the swaying motion or causing strains to the apparatus.

The claim of the complainer in his patent was for his mode of "imparting an oscillating or rocking motion" to the vat when in use with a pulsating diaphragm.

That the machine thus published was a success as an improvement on previously existing machines is conclusively proved. No better evidence could be given than this, that in four years 214 machines, to a value of about £25,000, have been sold, the sale having increased from 35 in 1893, the first year, to 87 in 1896, the fourth year.

The respondents resist the granting of an interdict on various grounds. They attack the patent on the grounds that it does not set forth the invention clearly—that what is set forth is not new—that it does not distinguish between what is new and old, and that there is no ingenuity or invention. They further maintain that presuming the patent to be good, what they have done is not an infringement.

I cannot find any ground for the first contention. The specification seems to me to be clear and explicit, and indeed in the argument it was only impugned in one particular, viz., that it set forth that the shaft for working the diaphragm was described as being either "in line with or parallel to" the axis of the vat. This latter alternative, it was said, might mean parallel to in a horizontal line, and that if the machine were so constructed, it would not work practically, as the diaphragm would be subjected to strains. The Lord Ordinary in his note speaks of the two expressions as meaning the same thing. I cannot say that I agree with that view. I think they are alternative, the "parallel to" meaning "parallel to in a vertical line." But I think the ground is taken from below the respondent's case on this point by the evidence of his own skilled witness Mr Imray, who says that "no person would think of putting the rotating shaft horizontally parallel to the other, and when the figure appended to the specification is put to him as making it clear that what was meant was what any sensible workman would take it to mean, he says quite distinctly "I do not say it misleads you at all."

But the respondent contends that what the complainer has done is not new. He founds on a strainer for which one Brodie took out a provisional protection a good many years ago, as an anticipation. It is true that he describes a strainer which is to be rocked, but I think that what he proposed to do was something different from what is done in the complainer's machine. He only proposed to support the strainer on a rocking axle, and to cause each side of it to rise and fall alternately. There was no swaying of the whole straining vat from one side to the other, throwing out the refuse into channels at either side. In these respects the complainer's machine was quite different from Brodie's, and the evidence satisfies me that the differences were essential novelties and were effective, whereas Brodie's machine never was brought to effective result at all.

The respondent further says that the complainer's specification does not distinguish between what is new and what is old. This criticism does not appear to me to be well founded. I think the claim is

well drawn to express what was new, viz., the case of a strainer in a swaying motion through the arc of a circle, in combination with the application of the usual pulsating motion to the diaphragm.

Then it is said that the arrangement made by the complainer did not require any ingenuity or inventive power to develop it, and has no merit. This objection also seems to me to be unfounded. What the complainer accomplished successfully may have been done by simple mechanical expedients, but it was a solution of a difficulty which had not been solved before, and effected a very substantial improvement in a manufacture in which up to that time, although inventive minds had been at work, they had been unable to find a mode of getting over their difficulties.

Lastly, the respondent maintains that what he has been doing is not an infringement of the complainer's patent. He says that his machine differs from the complainers in this, that it sways only from the horizontal position of the strainer to a sloping position and back again. What he does is, in short, to do to one side only what the complainer does to both. That I have no doubt is an infringement. It is a similar action to produce a similar result, by swaying the strainer to wash off and remove the refuse that will not pass through. Further, I think that one of the forms which the complainer gives for the working of his swaying vat produces an action practically the same as the respondents, for in one form the strainer has a division across it. The result of that is that each half of the strainer acts in turn as the respondents' does—it sways from the horizontal and back again, having thus just two of the respondents' strainers side by side and working from the same axle. In my opinion the conclusion at which the Lord Ordinary has arrived is right, and I would move your Lordships to affirm his judgment.

LORD YOUNG, LORD TRAYNER, and LORD MONCREIFF concurred.

The Court adhered.

Counsel for Complainer—Sol.-Gen. Dickson, Q.C.—Jameson — Burnet. Agents—Skene, Edwards, & Garson. W.S.

Counsel for Respondents—Ure—Wilson. Agent—Lockhart Thomson, S.S.C.

Wednesday, June 9.

SECOND DIVISION.

[Lord Stormonth Darling, Ordinary.

CLAVERING, SON, & COMPANY *v.* HOPE.

Agent and Principal—Iron Broker—Broker Acting as Principal — Duty of Broker to Establish Privity of Contract between his Client and Sellers—Personal Bar.

A firm of brokers on the Glasgow iron market were instructed by a client to buy certain quantities of iron for him on various dates extending over a period of six months. Subsequent to these instructions they made contracts in each case for the purchase of iron at various prices and in various quantities, sending advice-notes to their clients, the prices stated being the average price paid by the broker for all the lots purchased on behalf of this client and certain other clients giving instructions through him. The brokers ultimately completed all the contracts made by paying the sums due upon them on the dates specified, and obtaining warrants. When the dates for payment in terms of these contracts arrived the client did not take up the iron, but directed it to be carried over. This was done by the brokers entering into contracts with their client (1) to purchase the iron from him at the price of the day for immediate settlement, and (2) to re-sell to him at the same price, plus 3d. per ton as store rent and interest, for settlement in a month. This was the most common and the cheapest way of carrying-over adopted in the Glasgow iron market. Numerous transactions of this kind were carried through by the brokers, who had always a warrant available which they could have given to their client if he had taken up and paid for his iron. In the advice-notes of the original purchases brokerage was charged, but in the carry-over contracts, in which the iron was stated to be "bought from" and "sold to" the client, there was no charge for brokerage. In the correspondence between the parties the brokers frequently referred to themselves as holding their client's iron. The client had been engaged in similar transactions for some years prior to the period covered by the transactions in question. The iron was ultimately sold at a loss, and the broker sued the client for the difference, with interest, store rent, and commission added, less sums paid to account. The client refused payment on the ground that the brokers had acted in contravention of their contract with him, in respect (1) that they had failed to make contracts on which he could sue the original sellers, and (2) that they had acted as